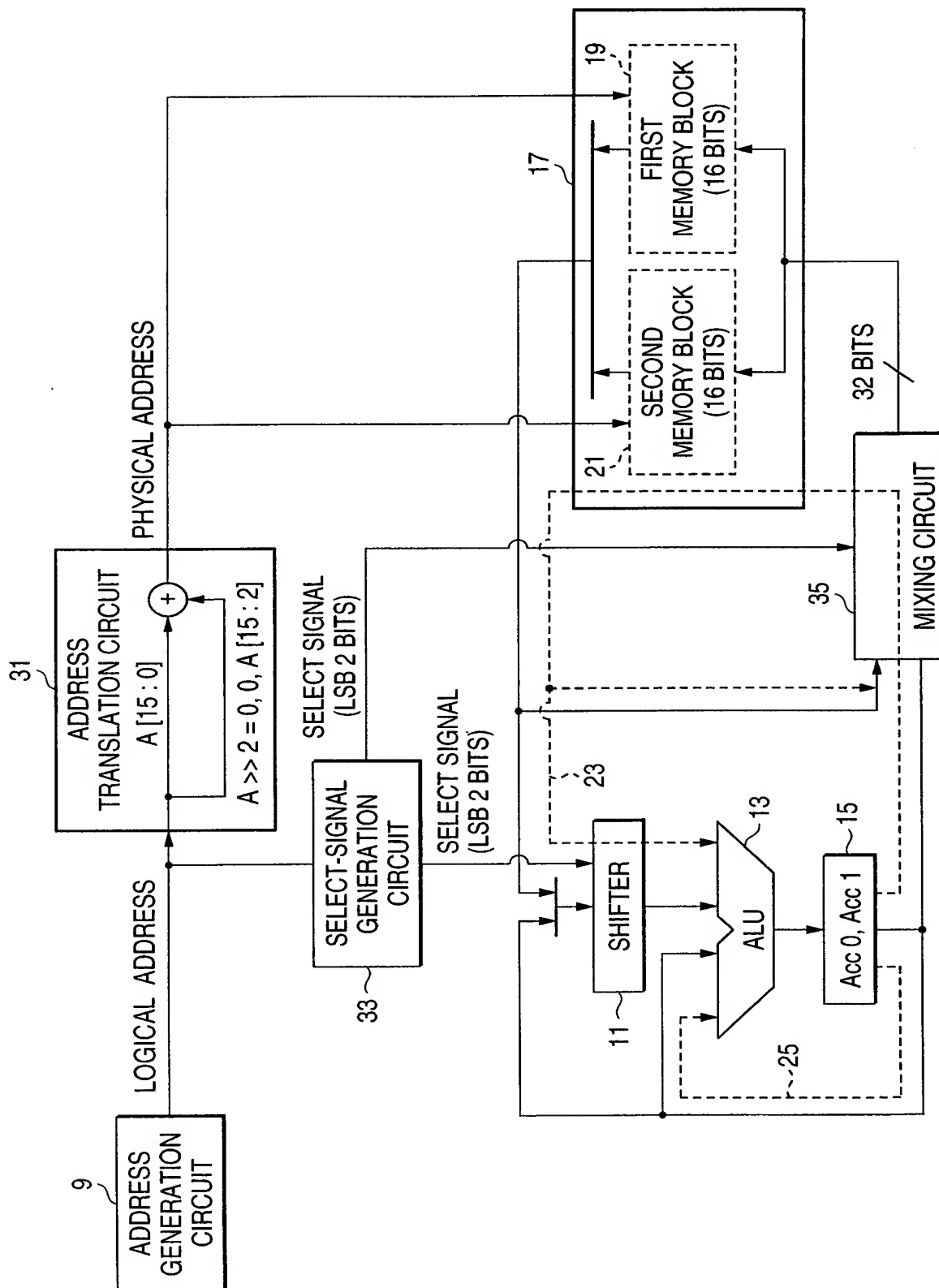


FIG. 1



FIRST MEMORY BLOCK

ADDRESS	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	R0 [5 : 0]						I0 [9 : 0]									
2	R1 [5 : 0]						I1 [9 : 0]									
4	R2 [5 : 0]						I2 [9 : 0]									
6	R3 [5 : 0]						I3 [9 : 0]									
8	R4 [5 : 0]						I4 [9 : 0]									
10	R5 [5 : 0]						I5 [9 : 0]									
12	R6 [5 : 0]						I6 [9 : 0]									
14	R7 [5 : 0]						I7 [9 : 0]									
16	R8 [5 : 0]						I8 [9 : 0]									
18	R9 [5 : 0]						I9 [9 : 0]									

FIG. 2

SECOND MEMORY BLOCK

ADDRESS	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	RESERVED DATA												R0 [9 : 6]			
3	RESERVED DATA												R1 [9 : 6]			
5	RESERVED DATA												R2 [9 : 6]			
7	RESERVED DATA												R3 [9 : 6]			
9	RESERVED DATA												R4 [9 : 6]			
11	RESERVED DATA												R5 [9 : 6]			
13	RESERVED DATA												R6 [9 : 6]			
15	RESERVED DATA												R7 [9 : 6]			
17	RESERVED DATA												R8 [9 : 6]			
19	RESERVED DATA												R9 [9 : 6]			
	RESERVED DATA															
	RESERVED DATA															

FIG. 3

FIRST MEMORY BLOCK

ADDRESS	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
0	R0 [5 : 0]						I0 [9 : 0]										▲
2	I2 [7 : 0]								▲	R1 [9 : 2]							
4	R3 [9 : 0]										I3 [9 : 4]						
6	R5[1:0]		I5 [9 : 0]										▲	R4 [9 : 6]			
8	I7 [3 : 0]				▲	R6 [9 : 0]									I6 [9:8]		
10	R8 [5 : 0]						I8 [9 : 0]										▲
12	I10 [7 : 0]								▲	R9 [9 : 2]							

▲ : HEAD ADDRESS OF Ix

SECOND MEMORY BLOCK

ADDRESS	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
1	R1[1:0]					I1 [9 : 0]							▲		R0 [9 : 6]			
3	I3 [3 : 0]				▲		R2 [9 : 0]									I2 [9:8]		
5	R4 [5 : 0]						I4 [9 : 0]										▲	
7	I6 [7 : 0]								▲		R5 [9 : 2]							
9	R7 [9 : 0]										I7 [9 : 4]							
11	R9[1:0]		I9 [9 : 0]									▲		R8 [9 : 6]				
13	I11 [3 : 0]				▲		R10 [9 : 0]									I10[9:8]		

▲ : HEAD ADDRESS OF Ix

FIG. 4

LOGICAL ADDRESS (a)	CALCULATION FORMULA: LOGICAL ADDRESS + (LOGICAL ADDRESS) >> 2	PHYSICAL ADDRESS (A)
0	$0/2 + [(0/2)/4] = 0 + 0 = 0$	0
2	$2/2 + [(2/2)/4] = 1 + 0 = 1$	1
4	$4/2 + [(4/2)/4] = 2 + 0 = 2$	2
6	$6/2 + [(6/2)/4] = 3 + 0 = 3$	3
8	$8/2 + [(8/2)/4] = 4 + 1 = 5$	5
10	$10/2 + [(10/2)/4] = 5 + 1 = 6$	6
12	$12/2 + [(12/2)/4] = 6 + 1 = 7$	7
14	$14/2 + [(14/2)/4] = 7 + 1 = 8$	8
16	$16/2 + [(16/2)/4] = 8 + 2 = 10$	10
18	$18/2 + [(18/2)/4] = 9 + 2 = 11$	11

FIG. 5

LOGICAL ADDRESS (a)	LSB 2 BITS	CALCULATION FORMULA: LSB 2 BITS x 4	SHIFT MAGNITUDE (B)
0	0	$0 \times 4 = 0$	0
2	1	$1 \times 4 = 4$	4
4	2	$2 \times 4 = 8$	8
6	3	$3 \times 4 = 12$	12
8	0	$0 \times 4 = 0$	0
10	1	$1 \times 4 = 4$	4
12	2	$2 \times 4 = 8$	8
14	3	$3 \times 4 = 12$	12
16	0	$0 \times 4 = 0$	0
18	1	$1 \times 4 = 4$	4

FIG. 6

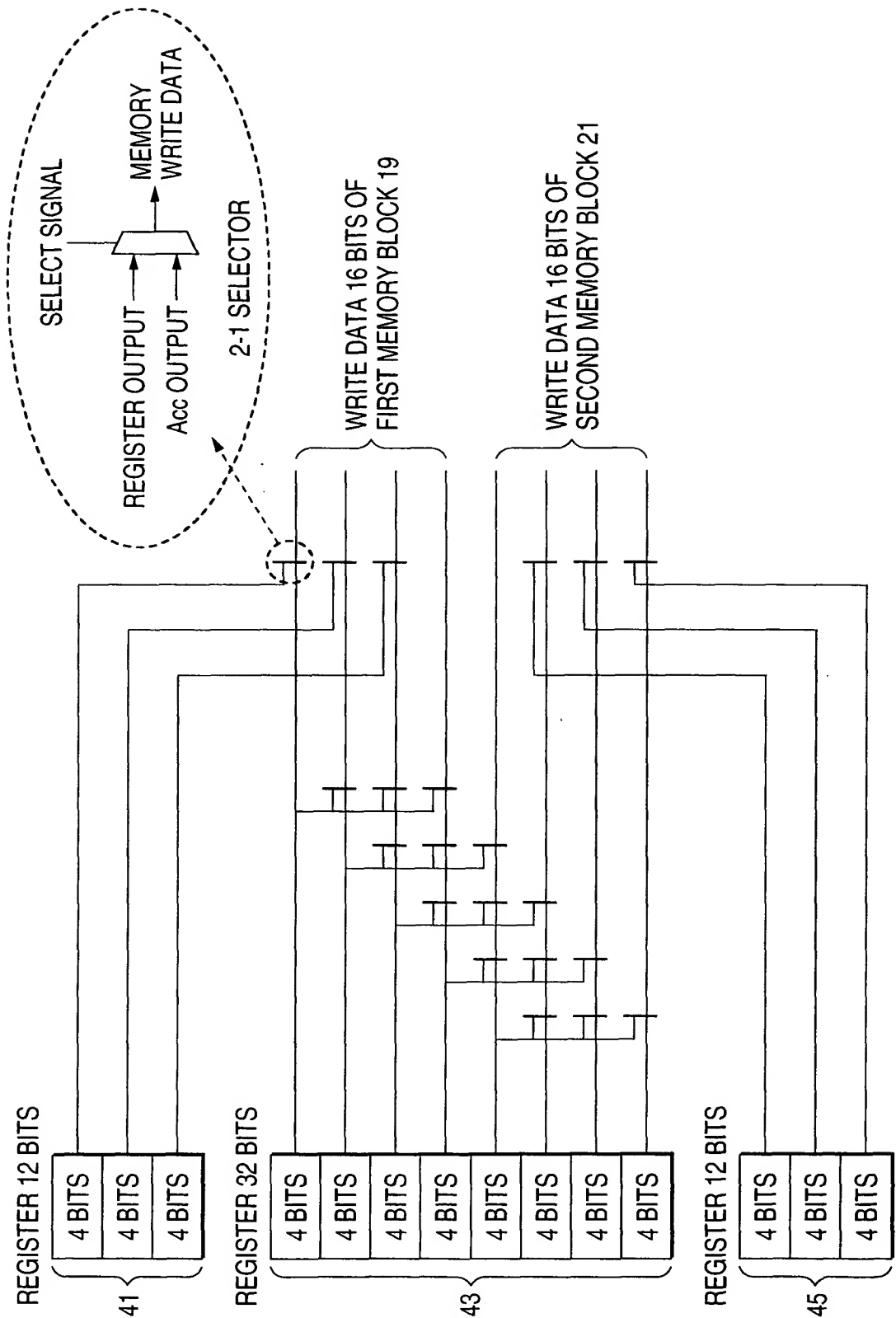


FIG. 7

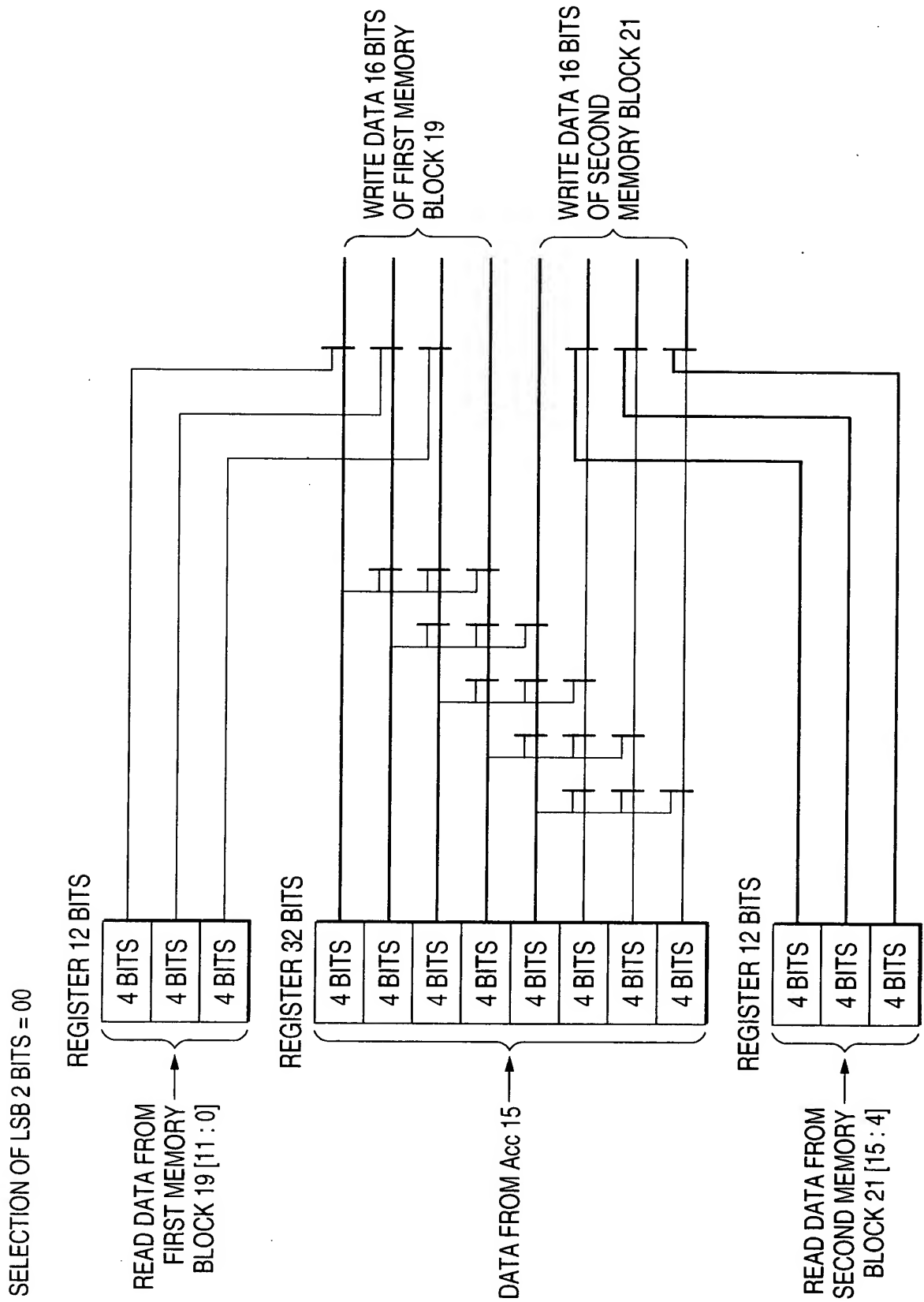


FIG. 8

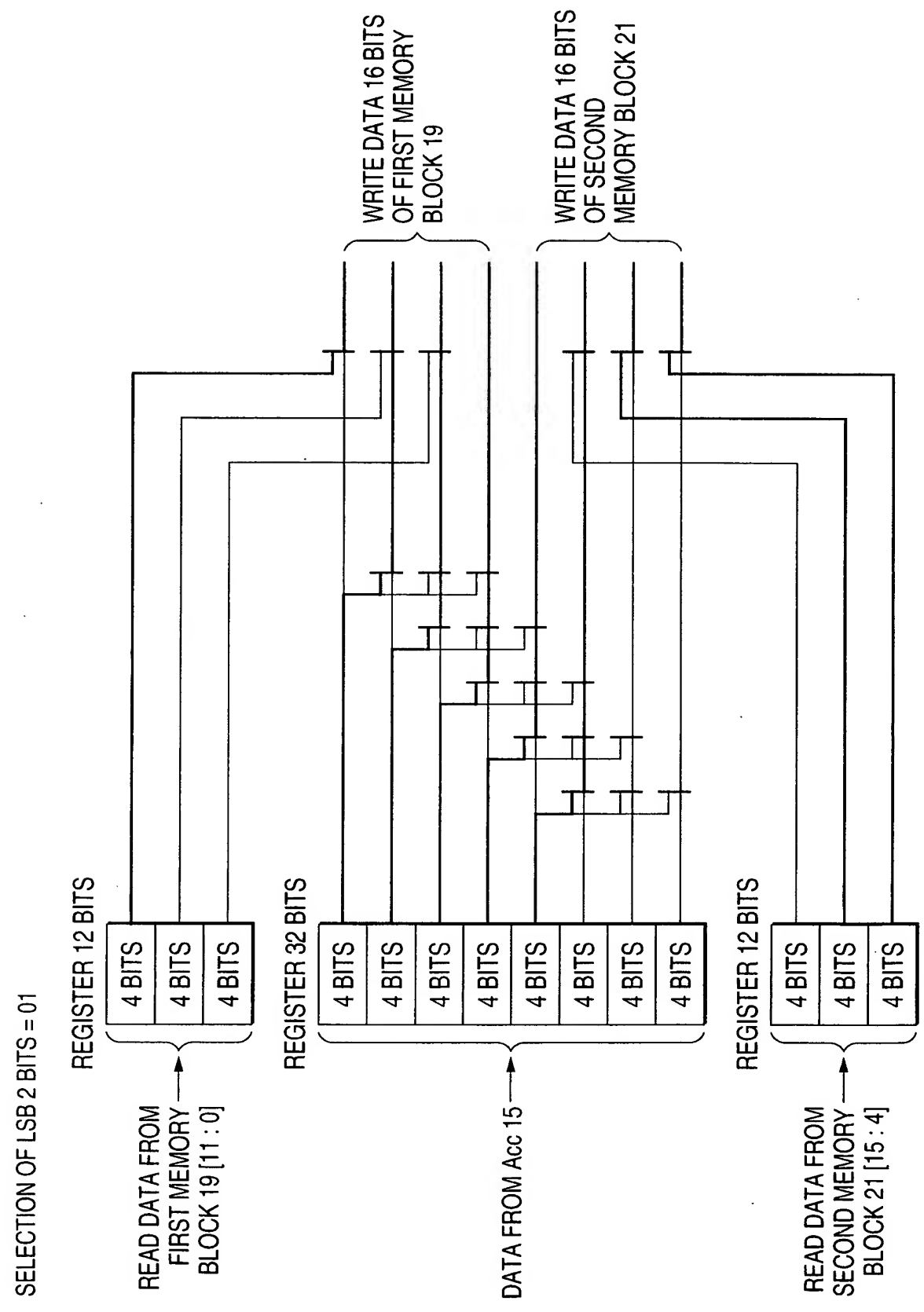




FIG. 9

